

SEQUENCE LISTING

<110> YUE, Henry
 LAL, Preeti
 TANG, Y. Tom
 LU, Dyung Aina M.
 AU-YOUNG, Janice

<120> MITOCHONDRIAL PROTEINS

<130> PF-0678 US

<140> To Be Assigned

<141> Herewith

<150> 60/124,655

<151> 1999-03-16

<160> 16

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<213> Homo sapiens

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<221> misc_feature

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His	Gln	Ser	Val	Ala	Thr	Asp	Gly	Pro	Ser	Ser	Thr	Gln	Pro	Ala
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Leu	Pro	Lys	Ala	Arg	Ala	Val	Ala	Pro	Lys	Pro	Ser	Ser	Arg	Gly
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Glu	Tyr	Val	Val	Ala	Lys	Leu	Asp	Asp	Leu	Val	Asn	Trp	Ala	Arg
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Arg	Ser	Ser	Leu	Trp	Pro	Met	Thr	Phe	Gly	Leu	Ala	Cys	Cys	Ala
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Val	Glu	Met	Met	His	Met	Ala	Ala	Pro	Arg	Tyr	Asp	Met	Asp	Arg
				95					100					105
Phe	Gly	Val	Val	Phe	Arg	Ala	Ser	Pro	Arg	Gln	Ser	Asp	Val	Met
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Ile	Val	Ala	Gly	Thr	Leu	Thr	Asn	Lys	Met	Ala	Pro	Ala	Leu	Arg
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Lys	Val	Tyr	Asp	Gln	Met	Pro	Glu	Pro	Arg	Tyr	Val	Val	Ser	Met
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Gly	Ser	Cys	Ala	Asn	Gly	Gly	Gly	Tyr	Tyr	His	Tyr	Ser	Tyr	Ser
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Val	Val	Arg	Gly	Cys	Asp	Arg	Ile	Val	Pro	Val	Asp	Ile	Tyr	Ile
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Pro	Gly	Cys	Pro	Pro	Thr	Ala	Glu	Ala	Leu	Leu	Tyr	Gly	Ile	Leu
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Met	Leu	Pro	Glu	Gly	Leu	Phe	Pro	Glu	His	Leu	Ile	Asp	Val	Leu
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Arg	Arg	Glu	Leu	Ala	Leu	Glu	Cys	Asp	Tyr	Gln	Arg	Glu	Ala	Ala	
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Cys	Ala	Arg	Lys	Phe	Arg	Asp	Leu	Leu	Lys	Gly	His	Pro	Phe	Phe	
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Tyr	Val	Pro	Glu	Ile	Val	Asp	Glu	Leu	Cys	Ser	Pro	His	Val	Leu	
				80					85						90
Thr	Thr	Glu	Leu	Val	Ser	Gly	Phe	Pro	Leu	Asp	Gln	Ala	Glu	Gly	
				95					100						105
Leu	Ser	Gln	Glu	Ile	Arg	Asn	Glu	Ile	Cys	Tyr	Asn	Ile	Leu	Val	
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Leu	Cys	Leu	Arg	Glu	Leu	Phe	Glu	Phe	His	Phe	Met	Gln	Thr	Asp	
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Pro	Asn	Trp	Ser	Asn	Phe	Phe	Tyr	Asp	Pro	Gln	Gln	His	Lys	Val	
				140					145						150
Ala	Leu	Leu	Asp	Phe	Gly	Ala	Thr	Arg	Glu	Tyr	Asp	Arg	Ser	Phe	
				155					160						165
Thr	Asp	Leu	Tyr	Ile	Gln	Ile	Ile	Arg	Ala	Ala	Ala	Asp	Arg	Asp	
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Arg	Glu	Thr	Val	Arg	Ala	Lys	Ser	Ile	Glu	Met	Lys	Phe	Leu	Thr	
				185					190						195
Gly	Tyr	Glu	Val	Lys	Val	Met	Glu	Asp	Ala	His	Leu	Asp	Ala	Ile	
				200					205						210
Leu	Ile	Leu	Gly	Glu	Ala	Phe	Ala	Ser	Asp	Glu	Pro	Phe	Asp	Phe	
				215					220						225
Gly	Thr	Gln	Ser	Thr	Thr	Glu	Lys	Ile	His	Asn	Leu	Ile	Pro	Val	
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Ser	Gly	Ser	Pro	Pro	Thr	Gln	Pro	Ser	Pro	Ala	Ser	Asp	Ser	Gly	
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Ser	Gly	Tyr	Val	Pro	Gly	Ser	Val	Ser	Ala	Ala	Phe	Val	Thr	Cys	
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Pro	Asn	Glu	Lys	Val	Ala	Lys	Glu	Ile	Ala	Arg	Ala	Val	Val	Glu	
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Lys	Arg	Leu	Ala	Ala	Cys	Val	Asn	Leu	Ile	Pro	Gln	Ile	Thr	Ser	
				95					100						105
Ile	Tyr	Glu	Trp	Lys	Gly	Lys	Ile	Glu	Glu	Asp	Ser	Glu	Val	Leu	
				110					115						120
Met	Met	Ile	Lys	Thr	Gln	Ser	Ser	Leu	Val	Pro	Ala	Leu	Thr	Asp	
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Phe	Val	Arg	Ser	Val	His	Pro	Tyr	Glu	Val	Ala	Glu	Val	Ile	Ala	
				140					145						150

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Leu	Pro	Val	Glu	Gln	Gly	Asn	Phe	Pro	Tyr	Leu	Gln	Trp	Val	Arg
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Gln	Val	Thr	Glu	Ser	Val	Ser	Asp	Ser	Ile	Thr	Val	Leu	Pro	
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Ile	Arg	Val	Ser	Val	Tyr	Pro	Phe	Thr	Leu	Ile	Arg	Thr	Arg	Leu
				35					40					45
Gln	Val	Gln	Lys	Gly	Lys	Ser	Leu	Tyr	His	Gly	Thr	Phe	Asp	Ala
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Phe	Ile	Lys	Ile	Leu	Arg	Ala	Asp	Gly	Ile	Thr	Gly	Leu	Tyr	Arg
				65					70					75
Gly	Phe	Leu	Val	Asn	Thr	Phe	Thr	Leu	Ile	Ser	Gly	Gln	Cys	Tyr
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Val	Thr	Thr	Tyr	Glu	Leu	Thr	Arg	Lys	Phe	Val	Ala	Asp	Tyr	Ser
				95					100					105
Gln	Ser	Asn	Thr	Val	Lys	Ser	Leu	Val	Ala	Gly	Gly	Ser	Ala	Ser
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Leu	Val	Ala	Gln	Ser	Ile	Thr	Val	Pro	Ile	Asp	Val	Val	Ser	Gln
				125					130					135
His	Leu	Met	Met	Gln	Arg	Lys	Gly	Glu	Lys	Met	Gly	Arg	Phe	Gln
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Val	Arg	Gly	Asn	Ser	Glu	Gly	Gln	Gly	Val	Val	Ala	Phe	Gly	Gln
				155					160					165
Thr	Lys	Asp	Ile	Ile	Arg	Gln	Ile	Leu	Gln	Ala	Asp	Gly	Leu	Arg
				170					175					180
Gly	Phe	Tyr	Arg	Gly	Tyr	Val	Ala	Ser	Leu	Leu	Thr	Tyr	Ile	Pro
				185					190					195
Asn	Ser	Ala	Val	Trp	Trp	Pro	Phe	Tyr	His	Phe	Tyr	Ala	Glu	Gln
				200					205					210
Leu	Ser	Tyr	Leu	Cys	Pro	Lys	Glu	Cys	Pro	His	Ile	Val	Phe	Gln
				215					220					225
Ala	Val	Ser	Gly	Pro	Leu	Ala	Ala	Ala	Thr	Ala	Ser	Ile	Leu	Thr
				230					235					240
Asn	Pro	Met	Asp	Val	Ile	Arg	Thr	Arg	Val	Gln	Val	Glu	Gly	Lys
				245					250					255
Asn	Ser	Ile	Ile	Leu	Thr	Phe	Arg	Gln	Leu	Met	Ala	Glu	Glu	Gly
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Pro	Trp	Gly	Leu	Met	Lys	Gly	Leu	Ser	Ala	Arg	Ile	Ile	Ser	Ala
				275					280					285
Thr	Pro	Ser	Thr	Ile	Val	Ile	Val	Val	Gly	Tyr	Glu	Ser	Leu	Lys
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Lys	Leu	Ser	Leu	Arg	Pro	Glu	Leu	Val	Asp	Ser	Arg	His	Trp	
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Pro	His	Arg	Trp	Gly	Pro	Cys	Gly	Gly	Ser	Trp	Ala	Gln	Lys	Phe
				35					40					45
Tyr	Gln	Asp	Gly	Pro	Gly	Arg	Gly	Leu	Gly	Glu	Glu	Asp	Ile	Arg
				50					55					60
Arg	Ala	Arg	Glu	Ala	Arg	Pro	Arg	Lys	Thr	Pro	Arg	Pro	Gln	Leu
				65					70					75
Ser	Asp	Arg	Ser	Arg	Glu	Arg	Lys	Val	Pro	Ala	Ser	Arg	Ile	Ser
				80					85					90
Arg	Leu	Ala	Asn	Phe	Gly	Gly	Leu	Ala	Val	Gly	Leu	Gly	Leu	Gly
				95					100					105
Val	Leu	Ala	Glu	Met	Ala	Lys	Lys	Ser	Met	Pro	Gly	Gly	Arg	Leu
				110					115					120
Gln	Ser	Glu	Gly	Gly	Ser	Gly	Leu	Asp	Ser	Ser	Pro	Phe	Leu	Ser
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Glu	Ala	Asn	Ala	Glu	Arg	Ile	Val	Gln	Thr	Leu	Cys	Thr	Val	Arg
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Gly	Ala	Ala	Leu	Lys	Val	Gly	Gln	Met	Leu	Ser	Ile	Gln	Asp	Asn
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Ser	Phe	Ile	Ser	Pro	Gln	Leu	Gln	His	Ile	Phe	Glu	Arg	Val	Arg
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Gln	Ser	Ala	Asp	Phe	Met	Pro	Arg	Trp	Gln	Met	Leu	Arg	Val	Leu
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Glu	Glu	Glu	Leu	Gly	Arg	Asp	Trp	Gln	Ala	Lys	Val	Ala	Ser	Leu
				200					205					210
Glu	Glu	Val	Pro	Phe	Ala	Ala	Ala	Ser	Ile	Gly	Gln	Val	His	Gln
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Gly	Leu	Leu	Arg	Asp	Gly	Thr	Glu	Val	Ala	Val	Lys	Ile	Gln	Tyr
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Pro	Gly	Ile	Ala	Gln	Ser	Ile	Gln	Ser	Asp	Val	Gln	Asn	Leu	Leu
				245					250					255
Ala	Val	Leu	Lys	Met	Ser	Ala	Ala	Leu	Pro	Ala	Gly	Leu	Phe	Ala
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Glu	Gln	Ser	Leu	Gln	Ala	Leu	Gln	Gln	Glu	Leu	Ala	Trp	Glu	Cys
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Asp	Tyr	Arg	Arg	Glu	Ala	Ala	Cys	Ala	Gln	Asn	Phe	Arg	Gln	Leu
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Leu	Ala	Asn	Asp	Pro	Phe	Phe	Arg	Val	Pro	Ala	Val	Val	Lys	Glu
				305					310					315
Leu	Cys	Thr	Thr	Arg	Val	Leu	Gly	Met	Glu	Leu	Ala	Gly	Gly	Val
				320					325					330
Pro	Leu	Asp	Gln	Cys	Gln	Gly	Leu	Ser	Gln	Asp	Leu	Arg	Asn	Gln
				335					340					345
Ile	Cys	Phe	Gln	Leu	Leu	Thr	Leu	Cys	Leu	Arg	Glu	Leu	Phe	Glu
				350					355					360
Phe	Arg	Phe	Met	Gln	Thr	Asp	Pro	Asn	Trp	Ala	Asn	Phe	Leu	Tyr
				365					370					375
Asp	Ala	Ser	Ser	His	Gln	Val	Thr	Leu	Leu	Asp	Phe	Gly	Ala	Ser
				380					385					390
Arg	Glu	Phe	Gly	Thr	Glu	Phe	Thr	Asp	His	Tyr	Ile	Glu	Val	Val
				395					400					405
Lys	Ala	Ala	Ala	Asp	Gly	Asp	Arg	Asp	Cys	Val	Leu	Gln	Lys	Ser
				410					415					420
Arg	Asp	Leu	Lys	Phe	Leu	Thr	Gly	Phe	Glu	Thr	Lys	Ala	Phe	Ser
				425					430					435
Asp	Ala	His	Val	Glu	Ala	Val	Met	Ile	Leu	Gly	Glu	Pro	Phe	Ala
				440					445					450
Thr	Gln	Gly	Pro	Tyr	Asp	Phe	Gly	Ser	Gly	Glu	Thr	Ala	Arg	Arg
				455					460					465

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Ile	Gln	Asp	Leu	Ile	Pro	Val	Leu	Leu	Arg	His	Arg	Leu	Cys	Pro
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Pro	Pro	Glu	Glu	Thr	Tyr	Ala	Leu	His	Arg	Lys	Leu	Ala	Gly	Ala
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Phe	Leu	Ala	Cys	Ala	His	Leu	Arg	Ala	His	Ile	Ala	Cys	Arg	Asp
				500					505					510
Leu	Phe	Gln	Asp	Thr	Tyr	His	Arg	Tyr	Trp	Ala	Ser	Arg	Gln	Pro
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Asp	Ala	Ala	Thr	Ala	Gly	Ser	Leu	Pro	Thr	Lys	Gly	Asp	Ser	Trp
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Val	Cys	Ser	Lys	Lys	Lys	Ile	Lys	Thr	Asp	Lys	Pro	Tyr	Gly	Ile
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Gly	Gly	Gly	Leu	Thr	Val	Asp	Val	Asp	Ala	Asn	Gly	Arg	Lys	Gly
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Lys	Gly	Lys	Gly	Val	Tyr	Gln	Phe	Val	Asp	Lys	Tyr	Gly	Ala	Asn
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Val	Asp	Gly	Tyr	Ser	Pro	Ile	Tyr	Asn	Glu	Asp	Asp	Trp	Ser	Pro
				80					85					90
Thr	Gly	Asp	Val	Tyr	Val	Gly	Gly	Thr	Thr	Gly	Leu	Leu	Ile	Trp
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Ala	Val	Thr	Leu	Ala	Gly	Ile	Leu	Gly	Gly	Gly	Ala	Leu	Leu	Val
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Thr	Thr	Lys	Ile	His	His	Lys	Val	Thr	Glu	Asn	Trp	Ile	Ser	Ala
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Thr	Leu	Leu	Leu	Thr	Pro	Val	Val	Gly	Thr	Tyr	Gln	Tyr	Ala	Met
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<210> 12
<211> 741
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 3126833CB1

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<210> 13
<211> 1759
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 3446038CB1

<400> 13


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<210> 14
 <211> 2188
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 4113161CB1

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<210> 15
 <211> 488
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 4408678CB1

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<400> 15
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<210> 16
 <211> 473
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 4942111CB1

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